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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,242	05/16/2002	Vjekoslav Jakovac	P 290698	9395
909	7590	11/30/2004	EXAMINER	
PILLSBURY WINTHROP, LLP			BELL, BRUCE F	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
1746				

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/049,242	JAKOVAC ET AL.
	<b>Examiner</b> Bruce F. Bell	<b>Art Unit</b> 1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 14-23 and 28-30 is/are allowed.

6)  Claim(s) 1-6,8,9,24-27 and 31 is/are rejected.

7)  Claim(s) 7 and 10-13 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 16 May 2002 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Feature no. 9 in Figure 1 and feature no. 34 in Figure 4 are not disclosed in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8, 9, 24-27 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Pate (5538607).

Pate discloses an anode assembly comprising an anode bar for the production of molten metal by electrolysis. The anode bar is an elongated copper bar that is partially split along its length. Each leg of the elongated copper bar is received in a sleeve and inserted into a ring with a polygonal opening in the ring. A weld, intimately welding, each metal ring to each leg end. See abstract. Pate further discloses that the carbon block is connected to the anode bar or anode support. See col. 3, lines 63-64. The anode bar includes a bar or member 21 and is made of a highly electrically conductive material such as copper and has a rectangular configuration. See col. 4, lines 1-10. The anode assembly is disclosed as being connected to a conventional anode beam B. See col. 4, lines 11-16. The legs of the anode bar are inserted into a pair of hard metallic sleeves such as steel which are also highly electrically conductive and each sleeve is defined by an outer cylindrical surface 31, an inner cylindrical surface 32, a lower annular axial end face or surface 33, a chamfer 34 before each of the surfaces 31, 33 is disclosed. See col. 4, lines 21-26. The legs 27 inserted into each sleeve are inserted so that each leg portion is snugly accommodated in one of the slots 36 (notches). See col. 4, lines 30-33. Each leg is welded to the annular ring 40 in the area of the chamfer 43. See col. 4, lines 59-67.

The prior art of Pate anticipates the applicant's instant invention as set forth above. The examiner in charge of this application has broadly construed the metallic sleeves of the prior art of Pate to be both the outer structural sheath and the stubs, since the prior art of Pate appears to be disclosing that both features

can be done in a one step construction. In other words, it appears that the metallic sleeves are both the outer structural sheath and the stubs all in one. The recitations in the dependent claims with respect to the electrical and thermal conductivities, thermal expansion, core materials and sheath materials have been found in the prior art of Pate. Since Pate uses both the copper core and the steel sheath (sleeve), the conductivities and thermal expansions, etc., will all be inherent in the materials used in the construction of the anode assembly. The limitation in the dependent claim with respect to the thermal expansion of the stubs and the sheath being substantially the same is met by virtue of the one step construction wherein both the sheath and the stubs are one piece. Therefore, the prior art of Pate anticipates the applicant's instant invention as set forth in the instant claims.

***Allowable Subject Matter***

4. Claims 7, 10-23 and 28-30 are allowable over the prior art of record.
5. Claims 7 and 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach and/or suggest an anode assembly having a yoke that is protected by an outer protective sheath that extends substantially the length of the yoke's core. Further, the prior art does not teach and/or suggest an anode bar having an auxiliary stem and a main stem extending substantially the length of the

structural collar of the anode bar. A method of forming the anode body by forming a groove in the yoke and connecting the anode bar to the yoke in electrical contact with the core is also not taught or suggested.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BFB  
November 29, 2004

*Bruce Bell*  
Bruce F. Bell  
Primary Examiner  
Art Unit 1746